

Work Order ID 162882

Friday, June 16, 2017 8:13:29 AM

162882

Page 1

Item ID: D3917-3

Accept

N900040100

Setup Start *NIS1*

Revision ID:

Item Name: Washer

Stop *NS2*

Start Date: 7/13/2017 **Start Qty:** 24.00

24

Cust Item ID:**Required Date:** 7/18/2017 **Req'd Qty:** 24.00

24

Customer:

Reference:

Approvals: Process Plan: DAS Date: JUN 16 2017 Tooling: _____ Date: _____
QC: 9-89 Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3917	A

100

0.17

100

Hardinge

Hardinge CNC Lathe Small

Memo

0.69

TURN AS PER FOLIO FA876 & DWG

FOLIO REV: AA

DWG REV: A

DEBURR

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Quality Control

Memo

0.24

DAS
49

9-89

17/06/18

DAS
49
9-89

17/26/18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 162882

Friday, June 16, 2017 8:13:29 AM

162882

Page 2

Item ID: D3917-3 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Washer
 Start Date: 7/13/2017 Start Qty: 24.00 ***24*** Cust Item ID:
 Required Date: 7/18/2017 Req'd Qty: 24.00 ***24*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC8- Inspect parts - second check	0.00							DAS 44 9-89 17-JUN-19
120						24	0		
QC	Memo	0.48							
Quality Control									
130	Identify as per dwg & Stock Location: <u>STOP</u>	0.00				24			DAS 6 9-89 JUN 20 2017
130									
Packaging	Memo	0.24							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							17/6/21 28
140									
QC	Memo	2.40							
Quality Control									DAS 21 9-89 JUN 20 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																											
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval																																																								
Description Work Order Deviation				Disposition				Completed By																																																							
Page 1 of 2 Date: 10/1/2010 User: J. Smith								Lead hand / Supervisor Approval Verification																																																							
								QC / QA Coordinator Approval																																																							
Root Cause		FAULT CATEGORY																																																													
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
OTHER : ☐																																																															

Picklist Print

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Page 1

Work Order ID: 162882

162882

Parent Item: D3917-3

D3917-3

Parent Item Name: Washer

Start Date: 7/13/2017

Required Date: 7/18/2017

Start Qty: 24.00

Required Qty: 24.00

Comments: Ipp Rev:A New Issue 09-12-02 JLM Verified by:DD
per dwg REV.A DD 10.02.22 verified by:EC IPP Rev:B as

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MDELRRINR0.750		Purchased	No			100	f	47.8750	0.02	0.505263			DAS 49 9-89
MDFI RINR0 750									**				

Delrin Round Bar 0.75" color: black

Location

Loc Qty

Loc Code

MAT018

47.875

m137540

47.875

0.333

17/06/18

DQA: _____ Date: _____



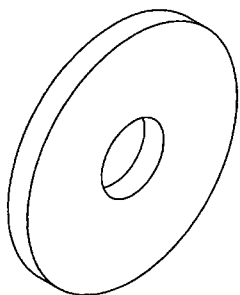
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

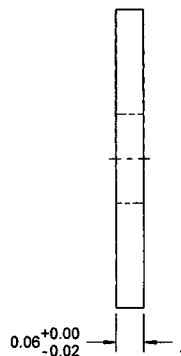
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

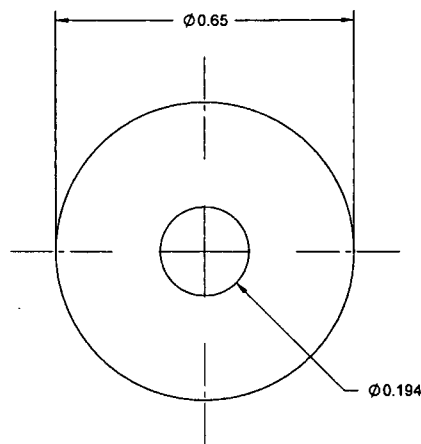
SHOP COPY
 RETURN TO
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 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. *16 2882 MJS*
1706-16



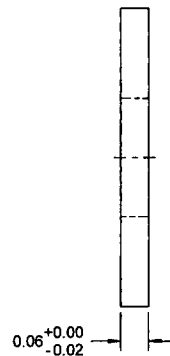
ISO VIEW



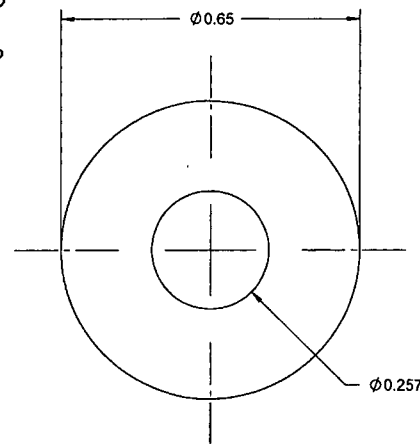
0.06 ^{+0.00}/_{-0.02}



D3917-1 WASHER



0.06 ^{+0.00}/_{-0.02}



D3917-3 WASHER

RELEASED
 2010-02-16
mm

NOTES:

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL, COLOR BLACK
 REF DART SPEC M-DELRIN-R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: < 0.01 lbs

A		NEW ISSUE		JPH	10.01.29
REV.	DESCRIPTION			BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWN	AJS				
CHECKED	RS	DRAWING NO.	REV. A		
MFG. APPR.	RS	D3917	SHEET 1 OF 1		
APPROVED	RS	TITLE	SCALE		
DE APPR.	RS	WASHER (350 BASKET)	NTS		
DATE	10.01.29	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			